Presentation to FCA

Information Services Industry Trends

September 9, 1993

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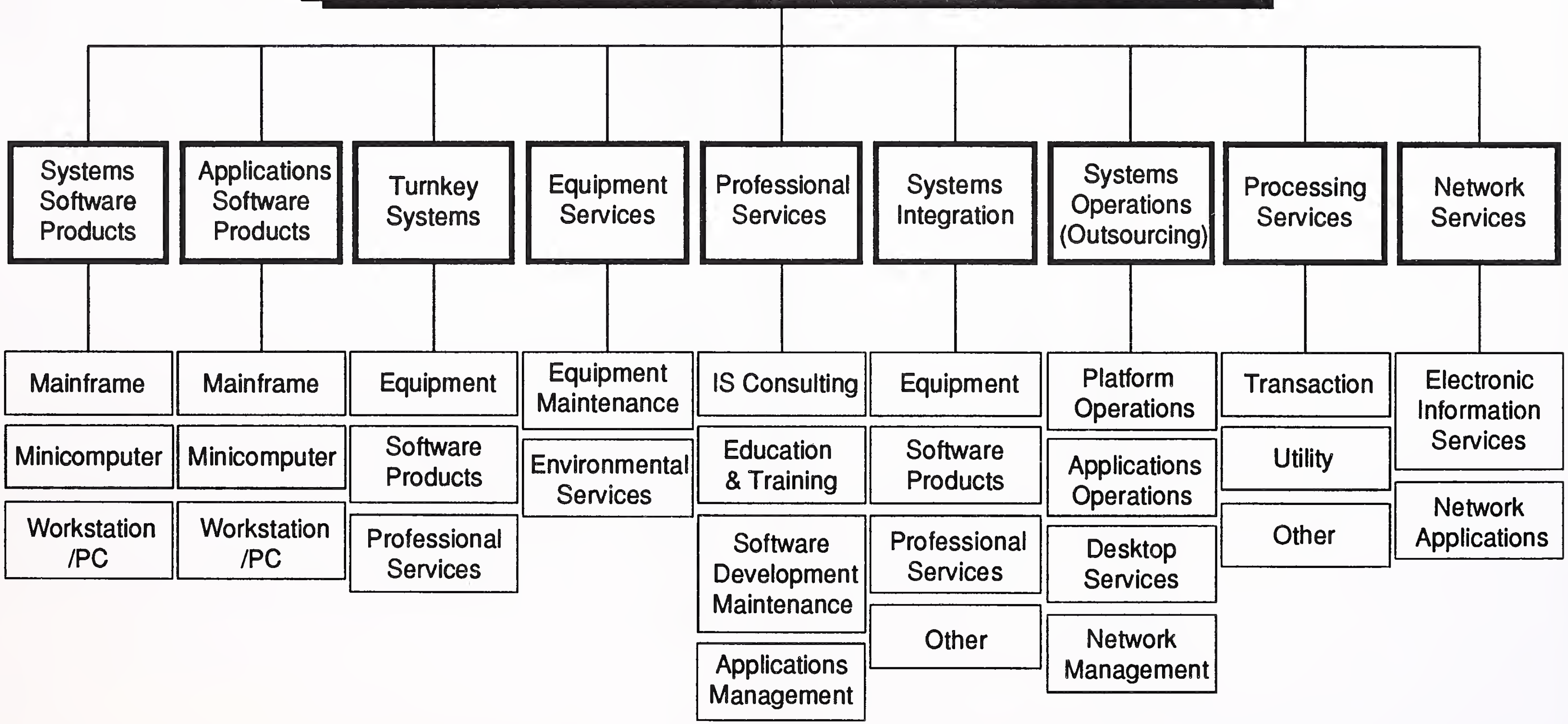
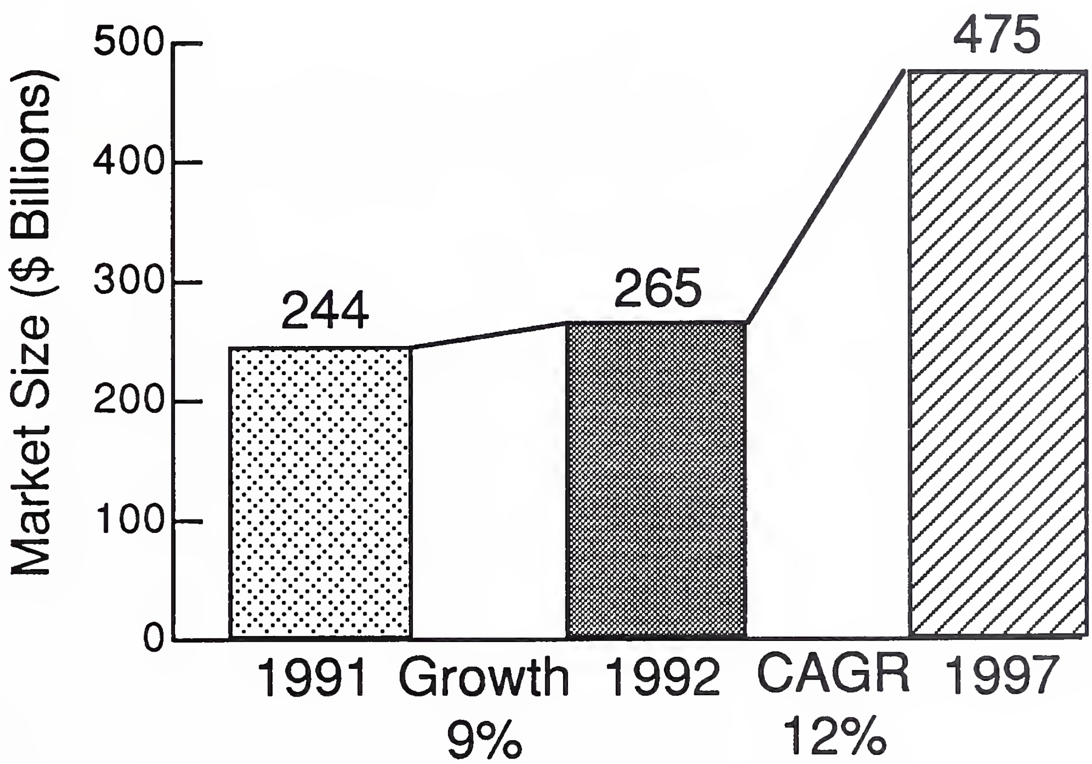
Information Services Industry Structure – 1993



MAP 9/7/93

Worldwide Market Forecast 1992-1997



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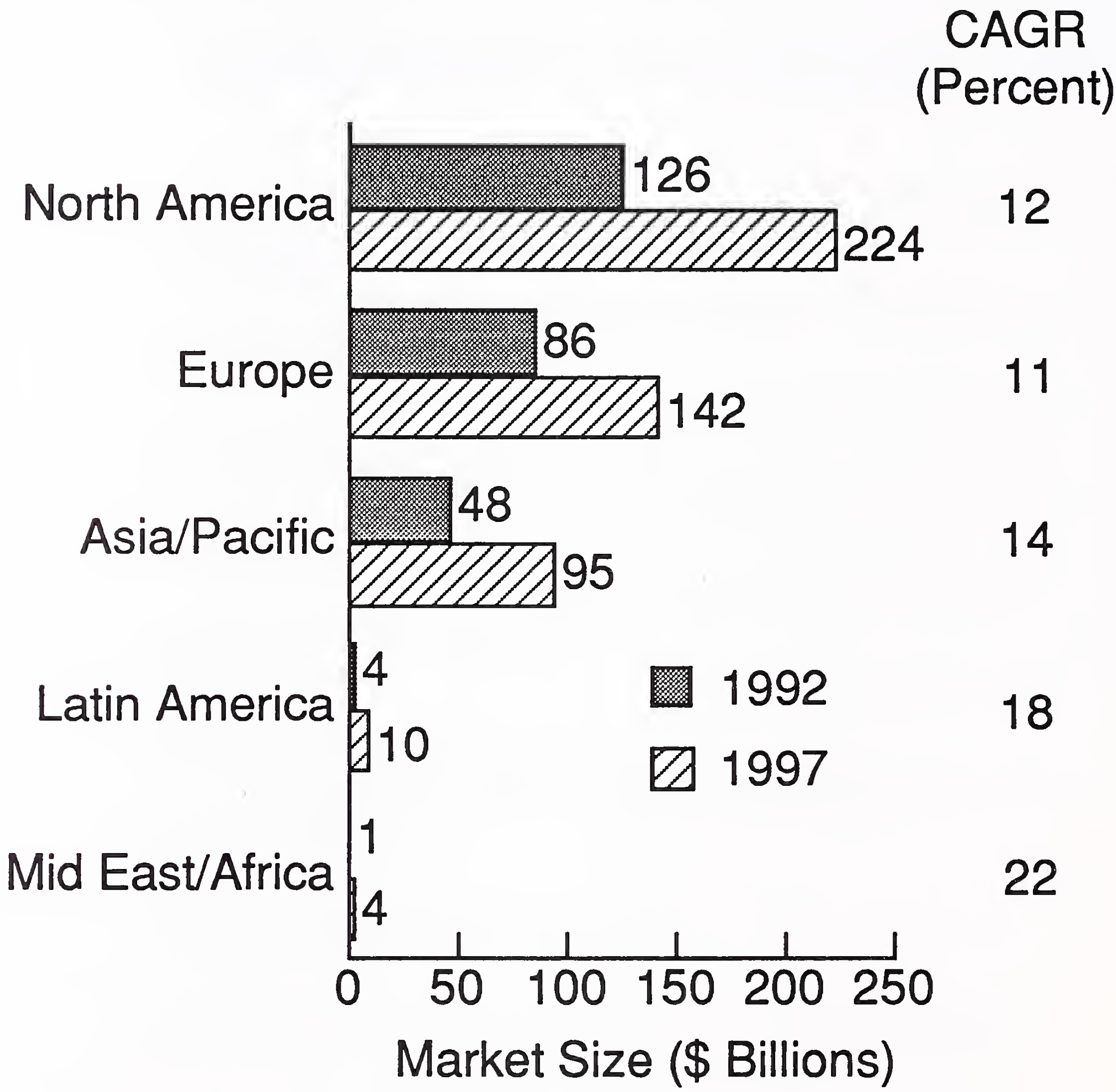
Worldwide Information Services Market Driving Forces

- Worldwide recessionary economy
- Information society
- Shifting information technology foundation
- Expanding role of general management
- Integrated solutions
- Industry-specific solutions
- Networking
- International standards
- Information services vendor capabilities

New Technology Foundations

- International standards
- Graphical user interface (GUI)
- Client/server
- Networking and integration
- Distributed data bases
- Imaging
- Engineered/re-engineered software

Worldwide Market Forecast by Regional Area, 1992-1997



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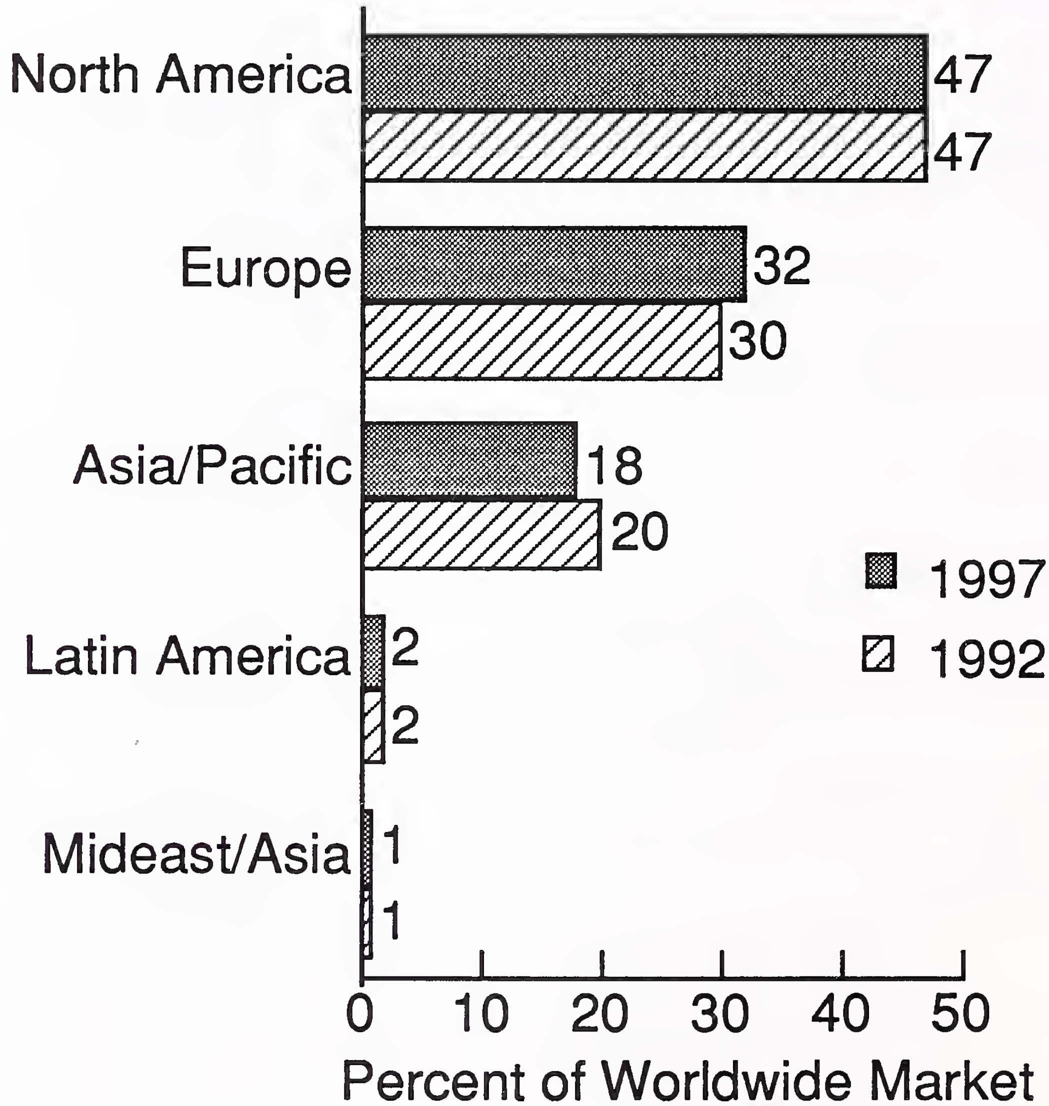
Compound Growth Rate Comparison by Region and Worldwide

Region	1991-1996 CAGR (Percent)	1992-1997 CAGR (Percent)
Asia/Pacific	18	14
Europe	15	11
Latin America	18	19
Middle East/Africa	22	22
North America	12	12
Worldwide	16	12

Worldwide Market Distribution,1992-1997



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Worldwide Market Forecast—Leading Countries

Country	1992		1997	
	$ Billions	Total (%)	$ Billions	Total (%)
United States	122	46	218	46
Japan	41	16	78	16
France	20	8	34	7
Germany	17	6	32	7
United Kingdom	14	5	22	5
Other Countries	51	19	91	19
Total	265	100	475	100

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Worldwide Information Technology Expenditures, 1992-1997

Expenditure Category	1992 ($B)	1997 ($B)	92-97 CAGR (%)	% Total 1992	% Total 1997
People	346	421	4	36	31
Hardware	180	198	2	19	15
Data Communications	32	65	15	3	5
Software Products & Turnkey Systems	108	193	12	11	14
Other Information Services	157	281	12	16	21
Equipment Services	41	57	7	4	4
Facilities and Overhead	99	126	5	10	9
Total	963	1,342	7	100	100

Note: Data may not add to totals due to rounding

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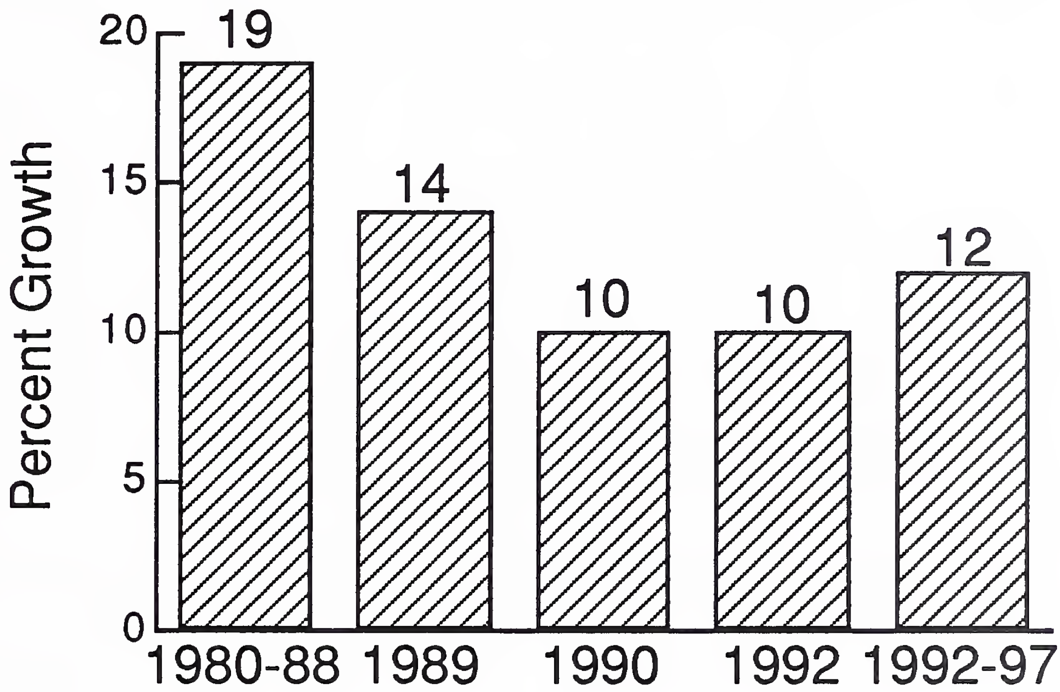
U.S. Information Services Industry Annual Growth Rates



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U.S. Information Services Industry Primary Driving Forces, 1992-1997

- Slower economic growth
- Globalization
- Growing influence of large vendors
- Outsourcing (buy versus make)
- Shift in technology
- The changing buyer

Selected Leading Information Services Vendors, 1992

Vendor	1992 U.S. Revenues ($ Billions)	Market Share (Percent) Rounded
IBM	8.1	7
EDS*	3.1	3
CSC	2.0	2
Digital Equipment	1.9	2
Andersen Consulting	1.6	1
ADP	1.4	1
Microsoft	1.0	1
Unisys	1.0	1
Hewlett-Packard	0.9	1
First Financial Mgmt.	0.9	1
GEIS	0.9	1
First Data Corp.	0.8	1
Computer Associates	0.7	1
Total	25.0	21

*Excluding GM

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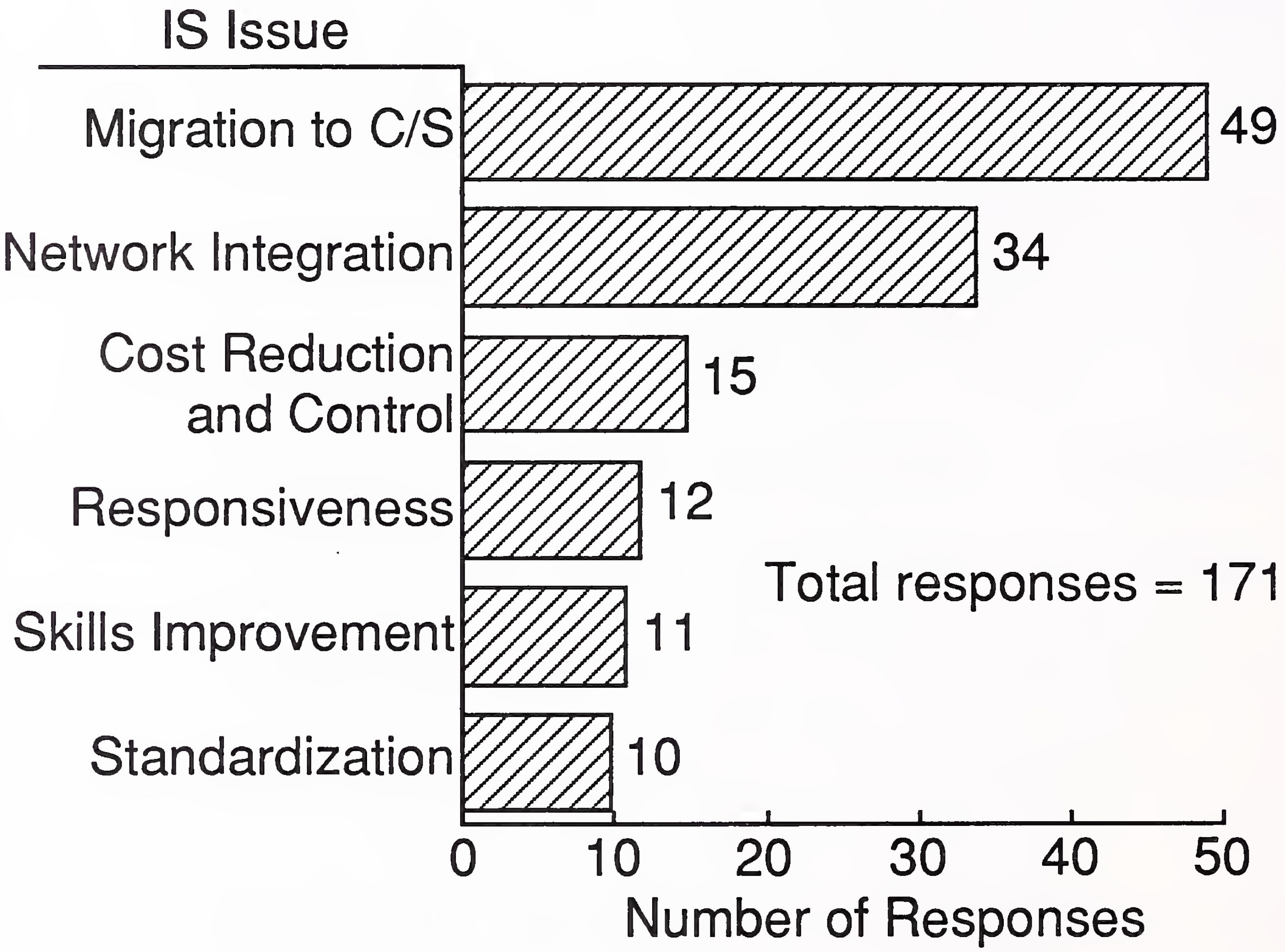
Major IS Issues
Discrete Manufacturing



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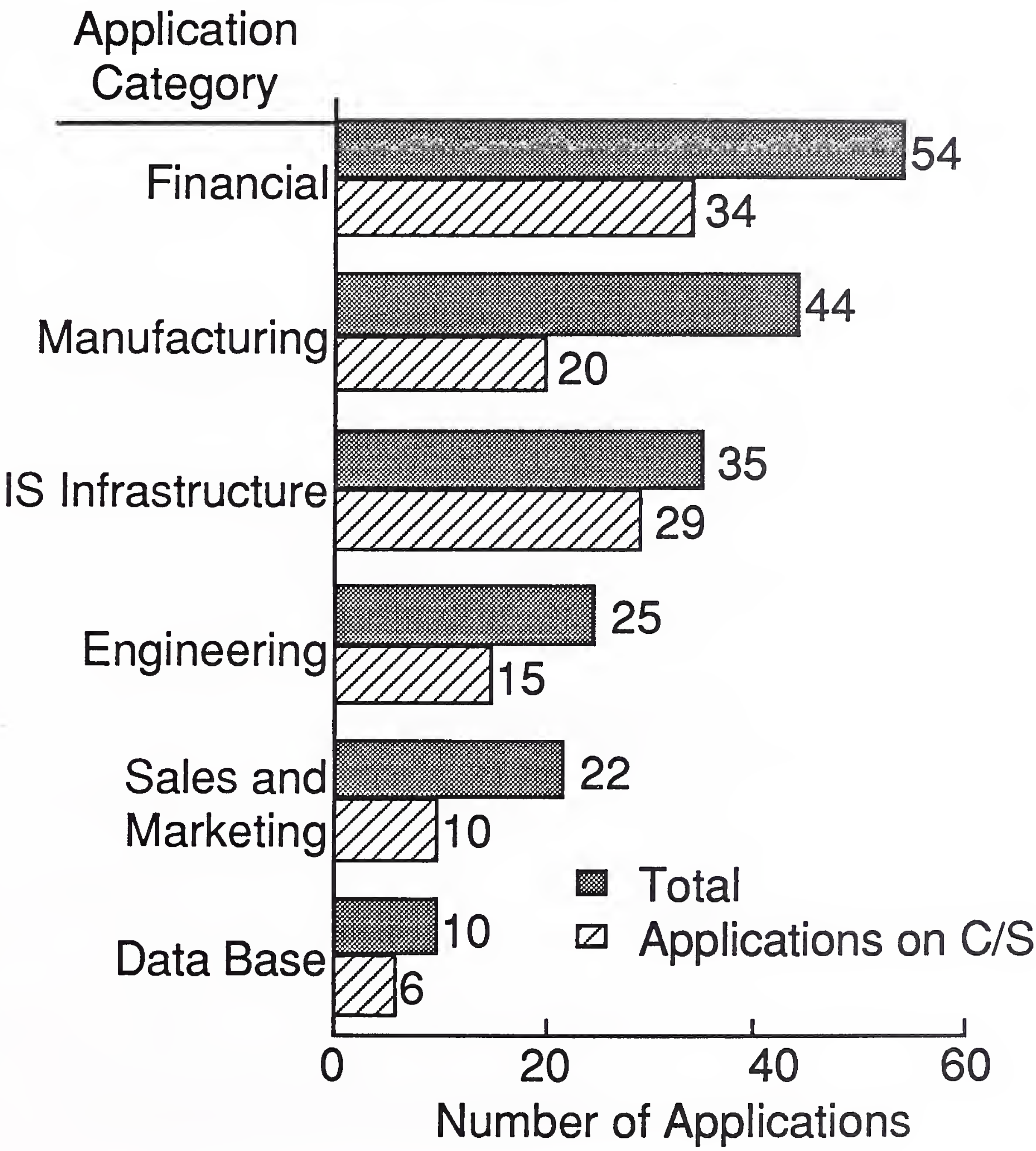
Discrete Manufacturing Planned Applications Changes and Use of Client/Server by Category



207 applications/158 respondents

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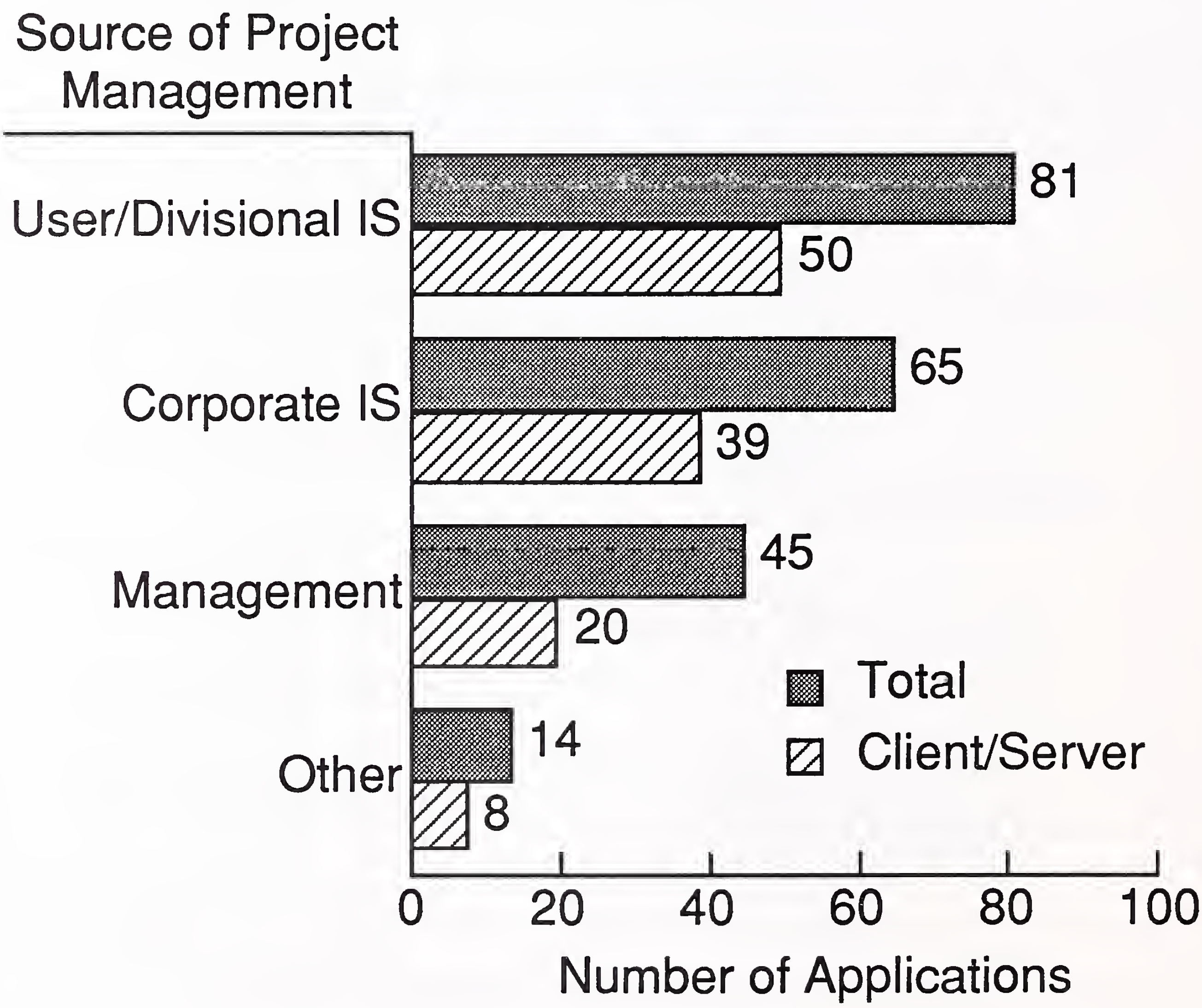
Source of Application Development Project Management Discrete Manufacturing



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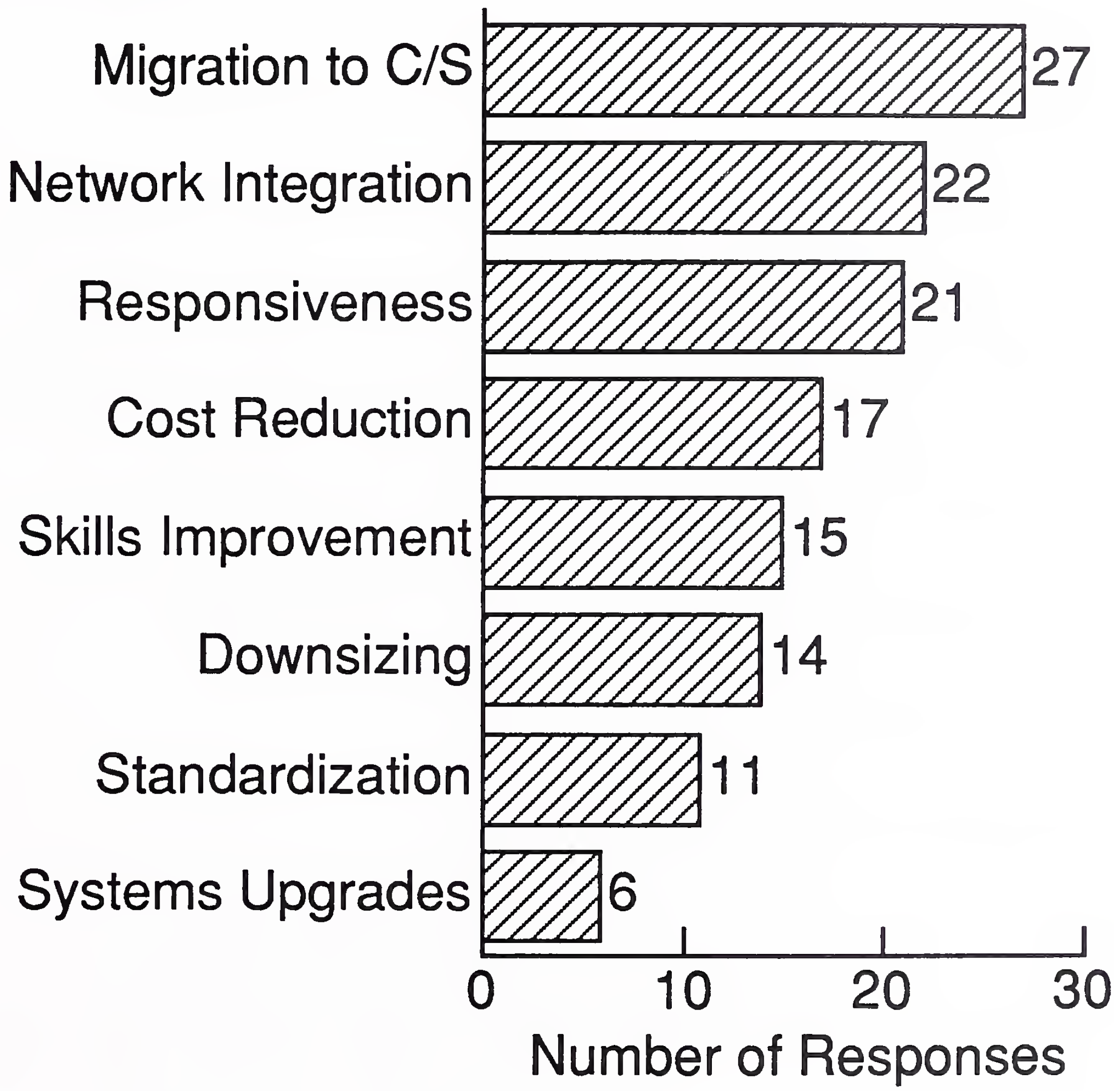
Process Manufacturing Major IS Issues



Total Responses = 133
80% of All Responses

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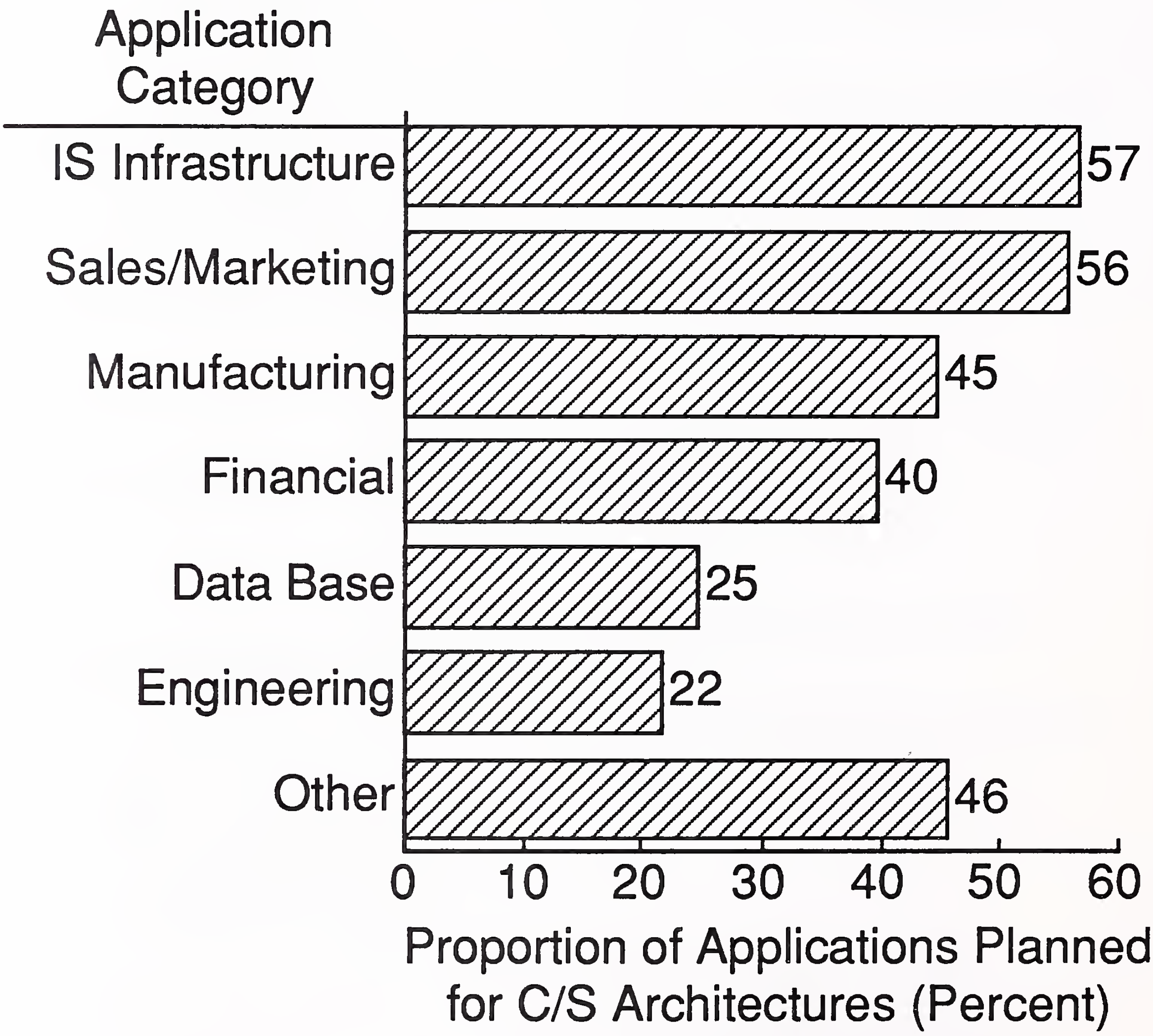
Process Manufacturing
Use of C/S by Application Category



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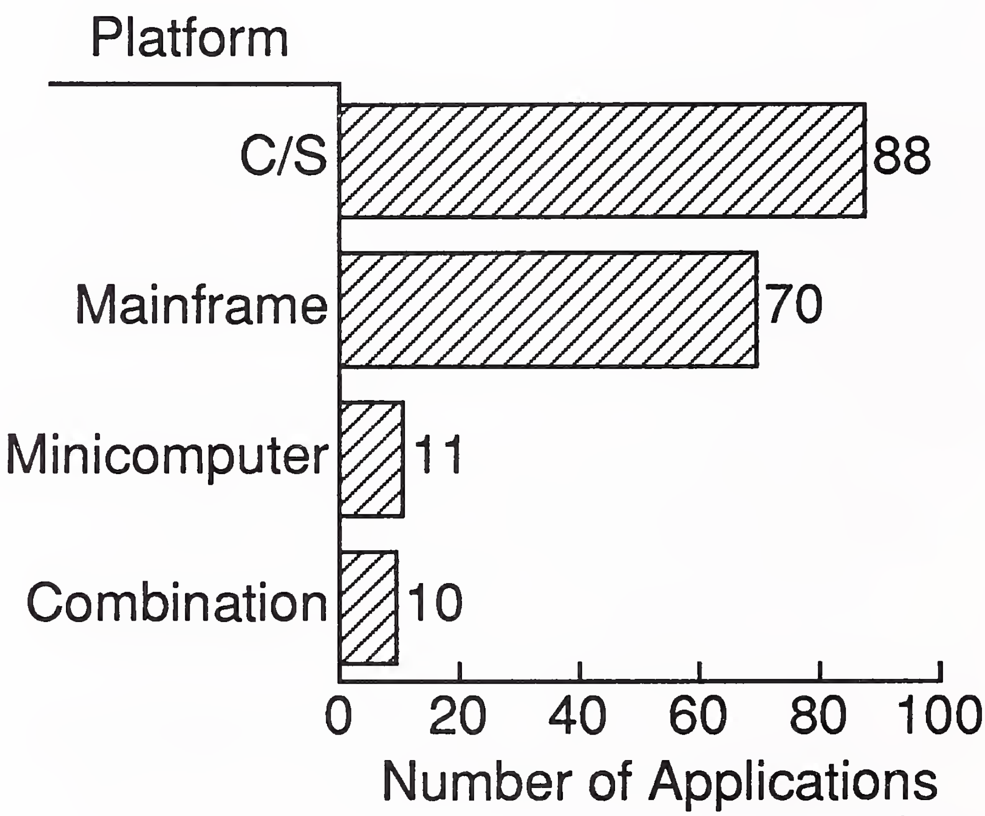
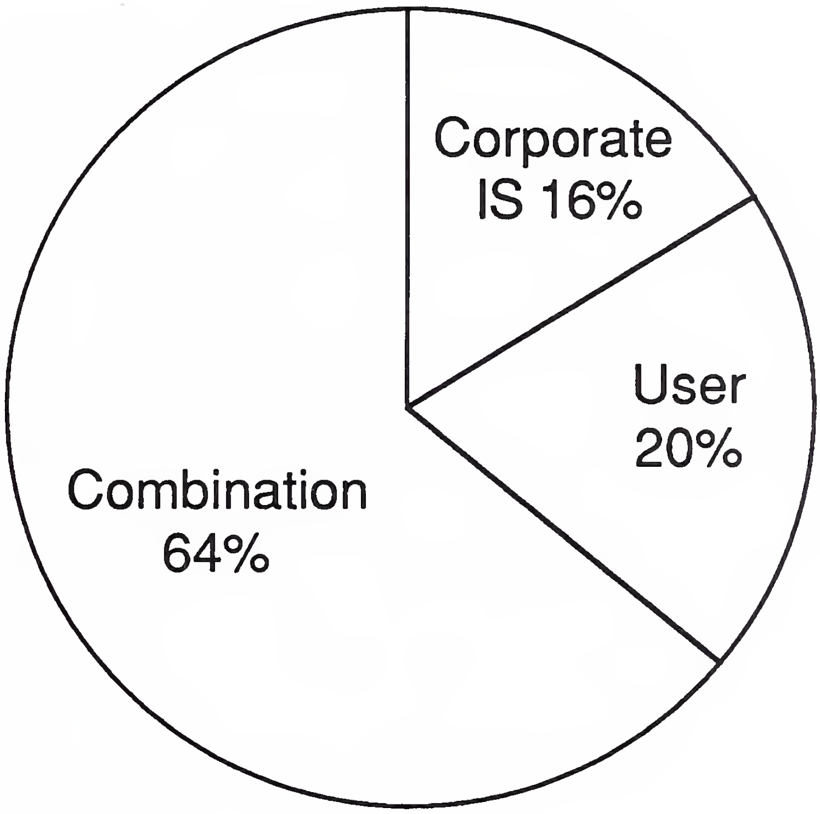
Banking and Finance

Target Platform for Planned Applications Development

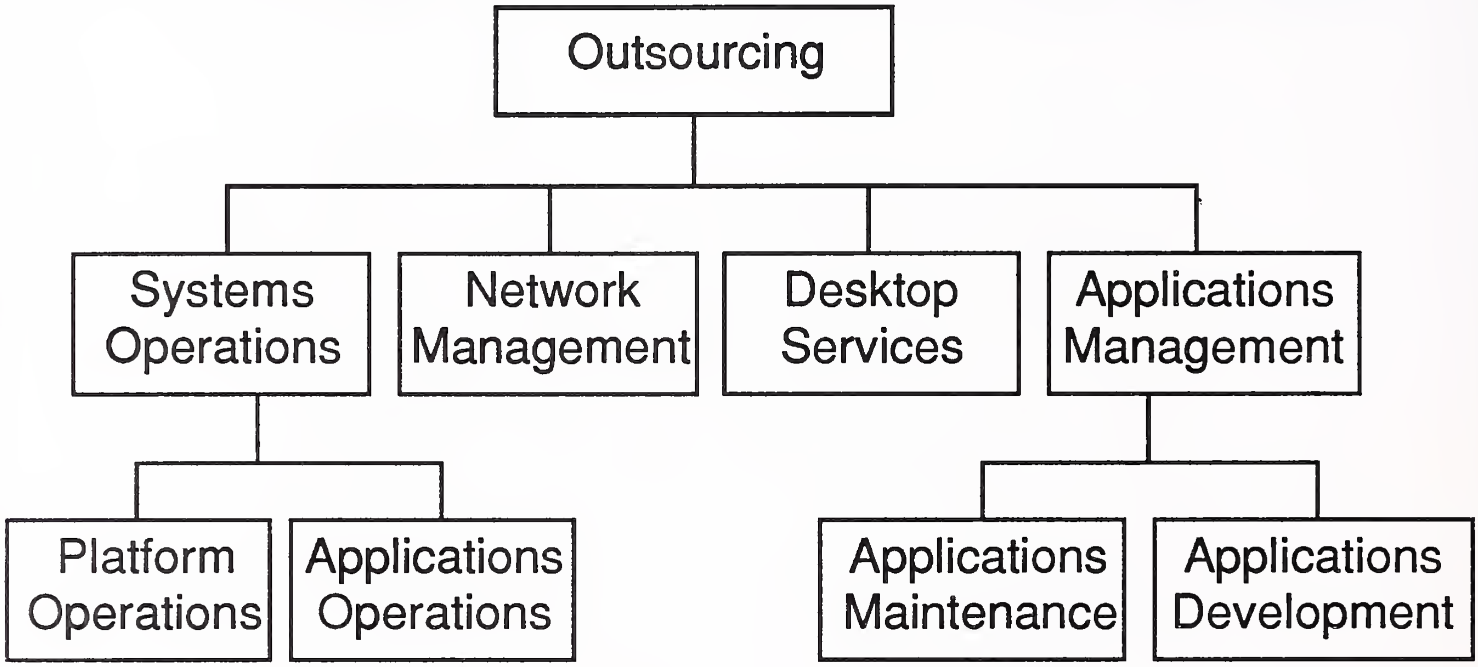


Internal Application Project Staffing



Proportion of Responsed (186 Projects)

Types of Outsourcing



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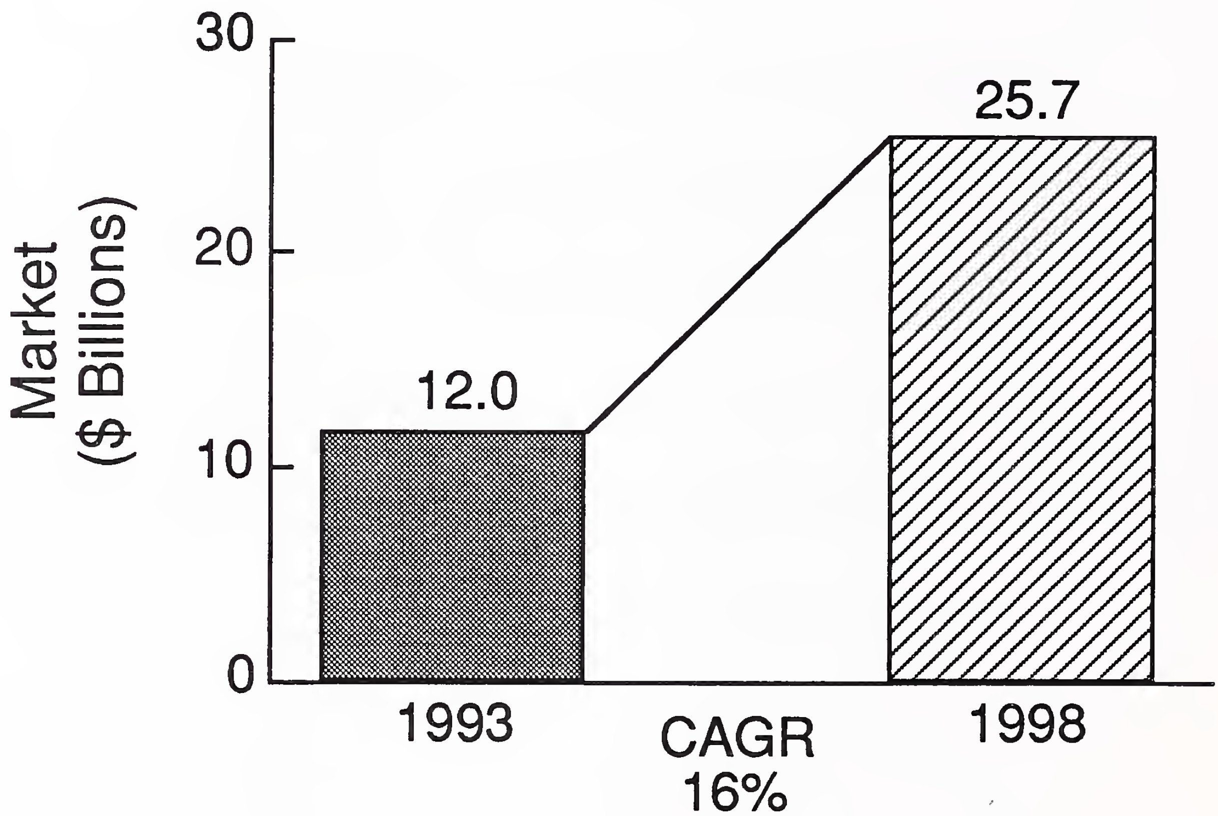
Major Buyer Issues—1992

- Reduce costs/conserve capital
- Improve service levels
- Resolve skills shortage
- Achieve technology upgrade
- Refocus executive attention
- Lose control to vendor

U.S. Outsourcing Market Forecast 1993-1998



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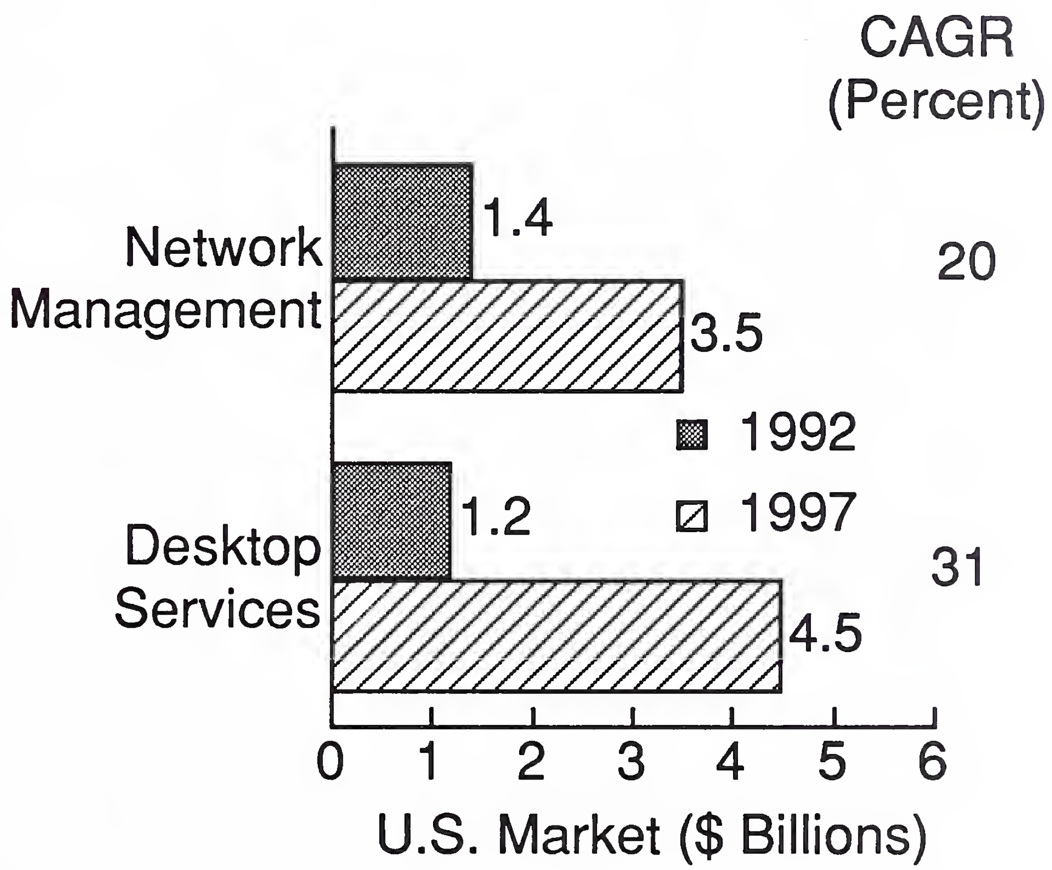
New Outsourcing Type Forecasts 1992-1997



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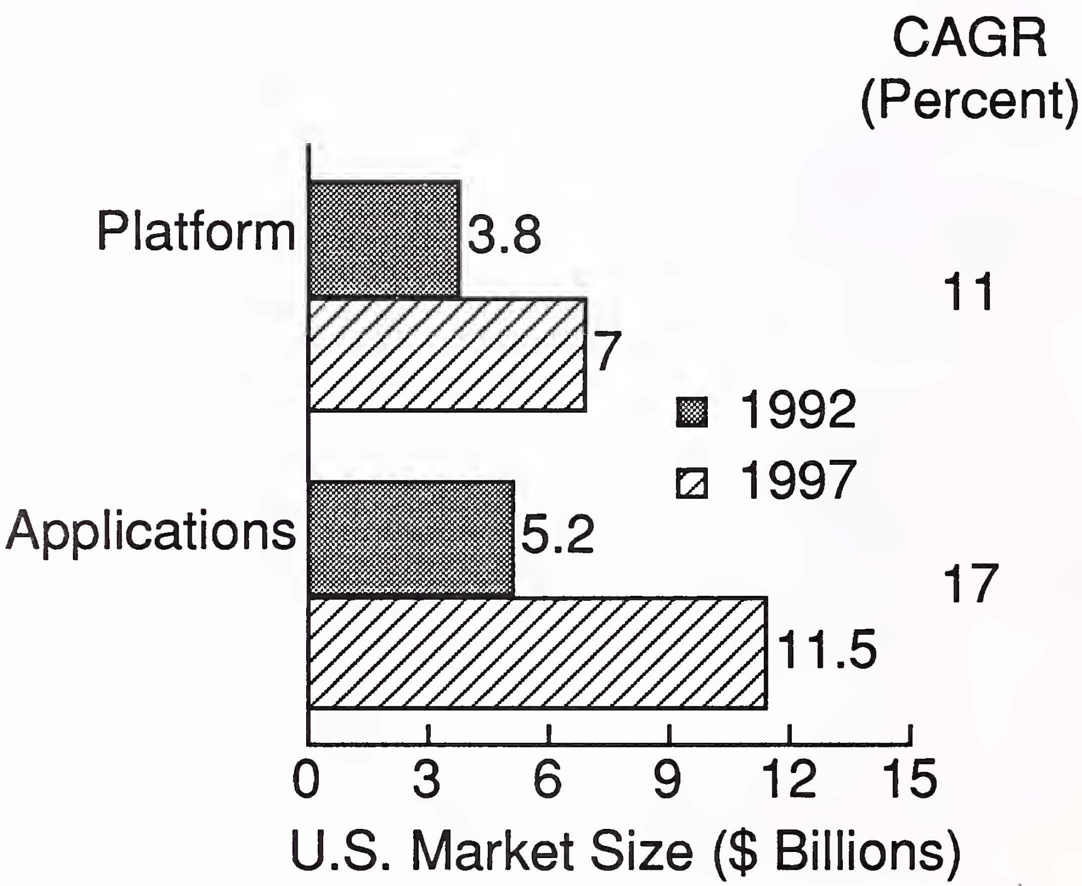
Systems Operations Type Forecasts, 1992-1997



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Leading Outsourcing Vendors

Vendor	1992 U.S. Revenues ($ M)	1992 Market Share (Percent)
EDS	1,600	13
CSC	580	5
IBM/ISSC	460	4
Digital	240	2
Systematics	220	2

New Technology Initiatives

- Client/server—Fast growth in desktop and network
- EDI/Electronic Commerce—Fast change in transactions activity
- Mobile communications—Exploding need for billing sophistication

Globalization Trends

- EDS—European presence
  - Chausson and Cíe
  - Credit Lyonnaís
  - Bertin Cíe-France
  - CC Banque, Belgium
- Perot—U.K. pentration
  - East Midlands Electricity
  - EuropeCar
- CSC—New activity
  - British Home Stores
- Digital—Canadian success
  - Imperial Oil
  - Tranalta Utilities
- Systemhouse—Beyond Canada/U.S.
  - Mexican Finance Ministry

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Outsourcing Client Satisfaction Study

- Preliminary Conclusions:
  - Clients looking for closer vendor relationships
  - Cost not overriding but important
  - Vendor staff not always viewed as best
    - Not enough resources
    - Not high quality

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ISO 9000 Compliance

- Critical to software companies
- Causes process redesign
- Calls for periodic site audits
- Strong business reasons to begin process
- Especially important for international business

Major Awards

- MASS. Blue Cross/Blue Shield/EDS
- Continental Banks/ISSC
- FAA (CORN)/EDS
- First Fidelity Banccorp/EDS
- First American Bankshares/Perot
- California Medicare/EDS
- HUD/Martin Marrietta
- WCI Steel/CSC
- NCNB/Perot
- Jackson National Life/EDS

Conclusions

- Outsourcing vendors need integrators' skills
- Risk-and-cost management essential
- Users want partners, but for shorter time
- Major vendors continue to dominate market

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Leading U.S. Systems Integration Vendors

Vendor	U.S. Revenue ($ Millions)	Percent
IBM	1,900	21
EDS	820[2]	9
Digital	800	8
Andersen Consulting	730[1]	8
Computer Sciences Corp.	550	7

1. Includes INPUT's estimate of equipment content
2. Non-GM business only

Benefits of BPR

Benefit	Average Rating*
Faster customer responses	4.8
Better productivity	4.8
Competitive advantage	4.7
Faster product introduction	4.4
Quality improvements	4.3
Cost reduction	4.0
Increase revenue/business	4.0
New process development	3.2
Use of technology improves	2.3

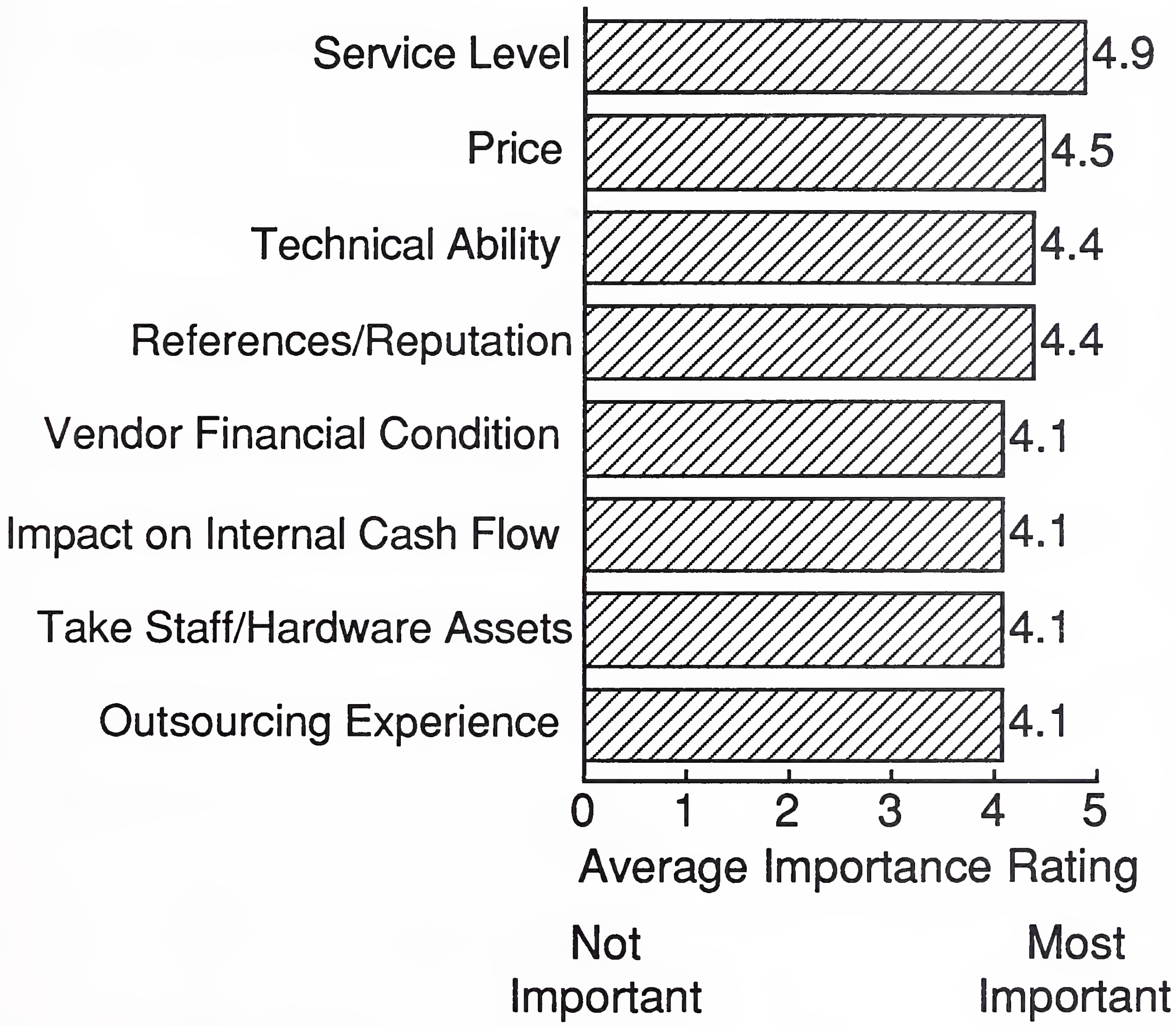
*Rating based on a 1-5 scale where
5 = most important and 1 = least important.

Vendor Success Elements in BPR Engagements

Element	Average Rating*
Similar engagement experience	4.4
Vertical industry focus	3.7
General BPR knowledge	3.4
Tools and methodologies	3.4
Change management focus	2.9
Program management	2.7
General business knowledge	2.6
Existing client relationship	2.5
Cost-effective consulting	2.4
Application knowledge	2.3
Systems integration service	2.0
Technical knowledge	1.7

*Based on a 1-5 scale where
5 = most important and 1 = least important.

Top Client Selection Criteria



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Perception of Vendors by Class

Class	Perception
1-Hardware Manufacturer (IBM, DEC, etc.)	Will treat problem as a systems issue with their hardware solution
2-Communications company (AT&T, RBOCs, etc.)	Not a viable focus for BPR, except within industry
3-Consulting-based professional services (McKinsey, Andersen, etc.)	Proper perception for BPR
4-IS-based professional services (TSC, CTG, etc.)	Viewed as systems integrators not business professionals
5-Systems operations (EDS, CSC, etc.)	Viewed as systems operators, but have good feel for business issues
6-Aerospace companies (Boeing, TRW, etc.)	Not viable focus for BPR, except within industry
7-Software suppliers solutions	All they know are software (Microsoft, etc.)
8-Other, BPR specialists (CSC Index, Oasis, etc.)	New breed created to address this planning need

Business Process Re-Engineering Success Stories

- CSC Index
  - Hallmark Cards
  - Bell Atlantic
- Cap Gemini
  - Dupont
  - Prudential Insurance
- IBM Consulting Group
  - Cigna
- Price Waterhouse
  - Acco USA

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Business Process Re-Engineering Success Stories

- Andersen Consulting
  - Northwest Airlines
  - Ucar
  - Aetna Life Insurance
- A.D. Little
  - Illinois Power Company
  - Texas A&M Research
- Coopers & Lybrand
  - Allied Signal
  - American Express

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Robert L. Goodwin
Manager,
Information Services
Market Analysis Program

PROFILE

CAPABILITIES

- Twenty-five years of successful sales, marketing, and general management in the computer equipment, remote processing services, and software industries.

- Expertise in business plan development, strategic partnering and acquisitions, industry marketing, VAR and reseller operations.

BACKGROUND

- Robert (Bob) Goodwin brings to INPUT and its clients comprehensive experience in executive management in large and mid-size corporations.

- Most recently, Senior Vice President–Marketing, Hotel Information Systems, leading vendor of global information systems to the hospitality industry.

- He has served as President of Command Data Systems, a public safety software and turnkey systems vendor. With Bob's leadership and marketing strategy, CDS became a highly visible and respected vertical market leader.

- Bob's qualifications include the role of Director of Marketing for Xerox Computer Services, in support of all field sales and customer services activities.

- At IBM, Bob served as Branch Manager and Assistant District Manager.

- Chairman, Electronic Forms Transfer Committee, ITAA

EDUCATION

- B.A., Psychology, Occidental College.

- Attended the MBA program, Golden Gate University.

Laura Haggerty
Program Manager
Information Services Vendor Analysis Program

PROFILE

CAPABILITIES

- For the last five years, Ms. Haggerty has specialized in both the analysis of key issues for companies in high-technology industries and the delivery of business information to companies via electronic media. Projects included the selection of text management software, the design of competitive intelligence systems, the development of key strategic joint ventures in the information industry, and the delivery of an on-line data base offering private company information.

- At INPUT, Laura Haggerty is the Vendor Analysis Program Manager and will develop systems for delivering INPUT reports via electronic media.

BACKGROUND

- From 1990-1992, Ms. Haggerty held the position of Manager, Business Product Development for Information Access Company, a vendor of CD ROM and on-line data bases. Her activities centered on the delivery of competitive information via CD ROM and on-line data bases to the corporate market.

- After receiving her Master's of Library and Information Science in 1987, Ms. Haggerty went on to manage the information resources of the Ernst & Young High Tech Group from 1987 to 1990. Her responsibilities included: data base development, providing primary and secondary research capabilities, management of competitive intelligence and contributing to the support of Ernst & Young's high-technology clients and their information needs.

EDUCATION

- B.A. (Sociology), State University of New York at New Paltz, New Paltz, NY

- M.L.I.S (Master's of Library and Information Science), University of California at Berkeley, Berkeley, CA

About INPUT

Since 1974, information technology (IT) users and vendors throughout the world have relied on INPUT for data, objective analysis, and insightful opinions to support their plans, market assessments and technology directions particularly in computer software and services. Clients make informed decisions more quickly and save on the cost of internal research by using INPUT's services.

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— *U.S.* —

- Outsourcing
- Client/Server
- Systems Integration
- IT Vendor Analysis
- EDI / Electronic Commerce
- U.S. Federal Government IT Procurements

— *European* —

- Outsourcing
- Systems Integration
- Customer Services

Custom Consulting

Many vendors leverage INPUT's proprietary data and industry knowledge by contracting for custom consulting projects to address questions about their specific market strategies, new product/service ideas, customer satisfaction levels, competitive positions and merger/acquisition options.

INPUT advises users on a variety of IT planning and implementation issues. Clients retain INPUT to assess the effectiveness of outsourcing their IT operations, assist in the vendor selection process and in contract negotiation/implementation. INPUT has also evaluated users' plans for systems and applications downsizing.

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